Appln. No.: 10/586,411

Amendment Dated April 13, 2009

Reply to Office Action of November 12, 2008

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A roller ironing machine for clothing articles, characterised in that it comprises at least one ironing unit comprising, in combination:

at least one ironing roller supported and guided to rotate about a fixed geometric axisin a rotating manner on a frame and fitted with heating means to heat its surface;

at least one <u>floatingpressing</u> pressure roller arranged in a rotating fashion on said frame, <u>said pressure roller being</u> parallel to said ironing roller and in contact <u>therewithwith</u> same, providing an ironing pressure on the clothing articles that pass between the <u>ironing</u> roller and the floating pressure roller rotating in opposite directions; two;

at least one endless belt mounted on a plurality of satellite rollers <u>placed aroundon</u> the ironing roller and gripping an angular portion of the ironing roller in order to accompany the clothing articles maintaining them in contact with <u>the ironing roller; same;</u>

drive means to rotate the ironing roller and/or circulate said endless belt; andbelts;

a pair of first inclined planes for respective ones of the at-least one pressure roller, mounted in a static manner on the frame and against which axial journals or rolling elements are supported, extending from opposite ends of the floating pressure roller or rolling elements installed on said axial journals are movably supported when the floating corresponding pressure roller, when the pressure roller is in contact with the ironing roller;

where wherein said first inclined planes form an angle with respect to an imaginary plane tangential to the ironing roller and the <u>floating</u> pressure roller along <u>a the-line</u> of mutual contact, <u>said angle having a value</u> and <u>said inclined plains being located in such a position with regard to said that the first inclined planes and the exterior surface of the ironing roller <u>axis so that form a wedge on which</u> the <u>floating</u> pressure roller is wedged by gravity <u>between</u>, <u>supporting</u> said <u>axial journals against the first inclined planes and the</u></u>

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ironingthrough the effect of a force including at least one normal force derived from a weight of the pressure roller, and resulting in an ironing force component exerted by the floating pressure roller against the ironing roller derived from a weight of the floating pressure roller that is greater than said weight of the floating pressure roller. pressure roller and a wedge effect favoured by the opposite rotation directions of the ironing roller and the pressure roller.

- 2. (Currently Amended)A roller ironing machine according to claim 1, wherein said satellite rollers on which said at least one endless belt is mounted include the <u>floating</u> <u>pressurepressing</u> roller.
- 3. (Currently Amended) A roller ironing machine according to claim 2, wherein a force component based on a first force-resulting from a tension of the endless belt is added to said force effecting the weightrest of axial journals against the floating pressure roller to providefirst inclined planes, providing an ironing force component exerted by the floating pressurepressing roller on the ironing roller greater than the sum of said weight of the floating pressurepressing roller and said force resulting from the tension of the endless belt.
- 4. (Currently Amended) A roller ironing machine according to claim 1, wherein said force effecting the rest of the axial journals on the first inclined planes further includes a force component provided by based on a thrusting device selected from a group consisting of at least one elastic member, one weight, one fluid dynamic cylinder or combinations thereof is applied to thrust the floating pressure roller against the first inclined planes and the ironing roller.
- 5. (Currently Amended) A roller ironing machine according to claim 1.3_7 further comprising a regulating device adapted to vary said inclination angle of the first inclined planes with respect to said imaginary plane tangential to the ironing roller and the floating pressure roller along a line of mutual contact so as to regulate said ironing force component according to the desired ironing characteristics.
- 6. (Previously Presented) A roller ironing machine according to claim 3, further comprising at least a tensor device adapted to provide said tension to the endless belt.

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7. (Currently Amended) A roller ironing machine according to claim 6, wherein said tensor device comprises a tensing roller included in said satellite rollers, and a pair of second inclined planes amounted in a static manner on the frame and against which axial journals or rolling elements extending from opposite ends of the corresponding tensing roller or rolling elements installed on said axial journals are movably supported, where said second inclined planes are at an angle with respect to a bisecting line the bicetrix of an angle formed by adjacent lengths of the endless belt at each side of said tensing roller and placed in such a positionway that the tension of the endless belt is automatically balanced with a second force in a direction away from the second inclined planes applied by a thrusting device or by gravity on the tensing roller and a normal reaction force exerted by the second inclined planes against the axial journals or rolling elements of the tensing roller.

- 8. (Previously Presented) A roller ironing machine according to claim 7, wherein said second force is provided by gravity and corresponds to the weight of the tensing roller.
- 9. (Currently Amended) A roller ironing machine according to claim 7, wherein the machine <u>further</u> comprises a regulating device adapted to vary said inclination angle of the second inclined planes <u>with respect to said bisecting line</u> so as to regulate the tension of the endless belt according to the desired tension characteristics.
- 10. (Currently Amended) A roller ironing machine according to claim 1, wherein the <u>floating pressurepressing</u> roller is placed at a predetermined height with respect to the ironing roller to facilitate loading of the clothing articles to be ironed through an entrance located at a first side of the ironing roller, and the machine comprises an unload roller located at a predetermined height with respect to the ironing roller to facilitate an unloading of the ironed clothing articles through an exit located at a second side of the ironing roller opposite the first side.
- 11. (Previously Presented) A roller ironing machine according to claim 10, wherein said unload roller is included in said satellite rollers.

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12. (Previously Presented) A roller ironing machine according to claim 10, wherein the machine comprises two or more ironing units connected in series, including a transferring device adapted to transfer the clothing articles from said unloading exit of one of said ironing units to said loading entrance of another adjacent of the ironing units.

- 13. (Previously Presented) A roller ironing machine according to claim 12, wherein each of said ironing units is mounted on an independent frame forming modular units able to be coupled together or with other processing units for laundry clothing articles.
- 14. (Previously Presented) A roller ironing machine according to claim 2, wherein said force effecting the rest of the axial journals on the first inclined planes further includes a force component based on a thrusting device selected from a group consisting of at least one elastic member, one weight, one fluid dynamic cylinder or combinations thereof.